Internet firefight is patently damaging 12 May 1999

E-commerce in the US is at risk from patents protecting online trading methods and Europe could be next, warns Richard Poynder.

The future looks rosy for online trading, with companies worldwide rushing to set up shop on the web and e-commerce revenues forecast to rise sharply over the next few years.

But there is a potential snag as the first shots are being fired in a patent war that could have a big impact on e-commerce.

Concern is growing that the pace of internet development, combined with a changing legislative environment, is causing patents to be granted on broad methods and processes rather than on novel inventions.

Critics say this could give a small group of US companies a 20-year monopoly on key parts of the web infrastructure and force many organisations to scale down, or abandon, their e-commerce efforts.

At the centre of the debate is a cluster of patents issued by the US Patent Office.

Massachusetts-based Open Market, for example, has been granted patents that, some claim, are sufficiently broad to allow the company to demand royalties from almost anyone engaged in e-commerce. These include a patent on a secure, real-time payment method using debit and credit cards; one covering electronic shopping carts and another on a technique for analysing how users browse web content.

Open Market has yet to sue anyone for infringing its patents. Nonetheless, it says its payment patent is one of the earliest and broadest internet patents granted. It adds that any company using electronic shopping carts without its licence is laying itself open to legal action.

Litigation has started in another case. Sightsound.com, which says it has a patent covering the sale of any digital audio or video recording over the internet, is suing CDNow, which runs the two most successful music sites on the web. Other music sites, including MP3.com, GoodNoise and Amplified.com, have received letters from Sightsound.com demanding royalties on every sale that involves downloading music to a customer.

Scott Sander, chief executive of Sightsound.com, insists that all the company is asking for is the same reward that any inventor could expect.

"Sony and Philips received a royalty for each compact disk that was sold while their patents on CD technology were in force," he says. "We're seeking the same right." Besides, Sightsound.com was seeking only a 1 per cent royalty.

The problem, responds Cary Sherman, senior executive vice-president at the Recording Industry Association of America, is that e-commerce requires a range of

technologies such as compression, watermarking and encryption. "Paying royalties on all these technologies adds up and represents a significant cost factor."

A greater threat was that many internet patents were unjustifiably wide-ranging. "We are seeing some very broad claims on patents governing the internet that could have a tremendous impact on the ability of the new medium to develop."

Another issue, argues Chuck Williams, chief scientist of Cylink, a Californian company that has itself been granted patents covering encryption, is the speed at which the internet is developing. "Like everybody else, the US Patent Office been caught out by the internet," he says.

Todd Dickinson, US Acting Commissioner of Patents & Trademarks, disputes this. "We have a highly skilled group of patent examiners with a technical background that matches up very well with the kind of technologies they are seeing and we think we issue patents of an appropriate breadth."

A recent ruling in the US Court of Appeals, endorsing the principle that business methods can be patented, has added to the controversy. It is argued that, by sanctioning the granting of patents on ways of doing business where they exploit new software techniques, the patent system is encouraging wily entrepreneurs to take familiar business methods from the physical world, add the words "network" and patent their use.

"A lot of commentators have worried that patents will be issued on business methods that have been used for years," says Mr Dickinson. "But that is not going to happen because if they have been used for years, and publicly, then a patent cannot be issued as the method is not novel."

Until recently it had been assumed that the controversy was specific to the US. E-commerce technologies are based on software and, as Jeff Watson, policy adviser at the UK Patent Office, points out, patents on software have not historically been granted in Europe. Nor was it generally accepted that business methods were patentable.

But this could change with initiatives to harmonise national patent systems. In response to an EC consultation document, the European Patent Office has, for example, proposed that the European Patent Convention rules on software patenting should be altered to conform with agreements negotiated through the World Trade Organisation.

"If this were to happen not only would it open the door to the patenting of software in Europe, but to business methods as well," says Bob Hart, who chairs the computer technology committee of the UK Chartered Institute of Patent Agents. "Which would make it highly likely that many of these e-commerce patents would be granted in Europe too."

"In fact", says Mike Tansey, managing director of specialist patent information provider, Derwent Information, "applications for practically every one of these

patents have already been filed at the World Patent Office in Geneva, and in some cases directly to national patent offices and the European Patent Office."

In the UK, those at most risk from e-commerce patents could include the growing number of retailers, including Tesco and Dixons, offering free internet services.

When a company's business is endangered by a patent, it normally negotiates a cross-licensing agreement. But as Alan Fisch, an intellectual property attorney with Washington DC's Howrey & Simon, explains: "If the infringing company has no intellectual property of interest to the patent holder, all it can offer is money." If the royalty demanded is high enough, it will jeopardise the licensee's business model.

John Higgins, internet team leader at Tesco, is sceptical. "We use commercial software from Microsoft. I can see it could be an issue for Microsoft but I can't see how this could apply directly to us." Mark Danby, general manager at Dixons' Freeserve unit, said there would always be alternative e-commerce solutions if he were asked to pay royalties on a specific technology.

According to Mr Fisch, the final arbiters will be the courts. "Litigation serves as the best test of a patent's validity and enforceability," he says. "Some of these patents simply won't survive a court challenge."

But if they do, they can be expected to have a significant impact on most companies' e-commerce plans.

Richard Poynder is co-author of *Hidden Value*, the Derwent Guide to Managing Intellectual Property, published by Derwent Information